

Milwaukee County COVID-19 vaccine data summary

Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on February 23, 2023 and includes data through February 20, 2023. Note that data for recent weeks may be under-reported due to lags in data entry. This report includes data on primary vaccinations and booster doses.

Milwaukee County COVID-19 Vaccination Totals December 12, 2020 - February 20, 2023			
	Milwaukee County	City of Milwaukee	Suburbs
Total primary vaccine doses administered	1,188,709	677,796	510,913
Pfizer	719,859	435,291	284,568
Pfizer Age 5-11	60,405	31,884	28,521
Pfizer Age 6M-4Y	10,675	4,361	6,314
Moderna	356,640	182,881	173,759
Moderna Age 6m-5Y	6,368	2,613	3,755
Johnson & Johnson	34,762	20,766	13,996
Total vaccine doses administered (including boosters)	1,766,138	968,896	797,242
Pfizer	968,549	571,251	397,298
Pfizer Age 5-11	66,092	34,210	31,882
Pfizer Age 6M-4Y	10,740	4,400	6,340
Pfizer Bivalent Booster	111,951	61,540	50,411
Moderna	506,128	249,487	256,641
Moderna Age 6M-5Y	6,414	2,628	3,786
Moderna Bivalent Booster	54,235	21,313	32,922
Johnson & Johnson	37,497	22,206	15,291
*Total individuals with one or more doses	634,552	365,581	268,971
Pfizer	372,342	226,752	145,590
Pfizer Age 5-11	32,158	17,449	14,709
Pfizer Age 6M-4Y	4,858	2,216	2,642
Moderna	184,174	95,178	88,996
Moderna Age 6M-5Y	3,561	1,500	2,061
Johnson & Johnson	34,654	20,700	13,954
*Total individuals completely vaccinated	589,758	334,323	255,435
Pfizer	348,795	209,110	139,685
Pfizer Age 5-11	28,461	14,599	13,862
Pfizer Age 6M-4Y	2,168	697	1,471
Moderna	172,798	88,042	84,756
Moderna Age 6M-5Y	2,814	1,118	1,696
Johnson & Johnson	34,654	20,700	13,954
*Total individuals boosted	351,590	183,695	167,895
Pfizer	208,280	114,318	93,962
Pfizer Age 5-11	9,905	4,189	5,716
Pfizer Age 6M-4Y	28	8	20
Moderna	116,223	55,406	60,817
Moderna Age 6M-5Y	340	122	218
Johnson & Johnson	16,810	9,648	7,162
*Individuals are grouped by the first vaccine product received. Note a small number of people received a different vaccine product for their second dose in a series			

**Percentage of Population Vaccinated
December 12, 2020 - February 20, 2023**

	Overall	Ages 5+	Ages 12+	Ages 16+
Milwaukee County				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	66.5%	70.6%	74.6%	75.4%
Completely vaccinated	61.8%	65.9%	69.8%	70.6%
City of Milwaukee				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	61.2%	65.6%	70.3%	71.4%
Completely vaccinated	56.0%	60.3%	64.9%	66.0%
Milwaukee County Suburbs				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	75.3%	78.6%	81.3%	81.6%
Completely vaccinated	71.5%	75.1%	77.7%	77.9%

***Population estimates from 2018 US Census American Community Survey**

**Percentage of Population Boosted
December 12, 2020 - February 20, 2023**

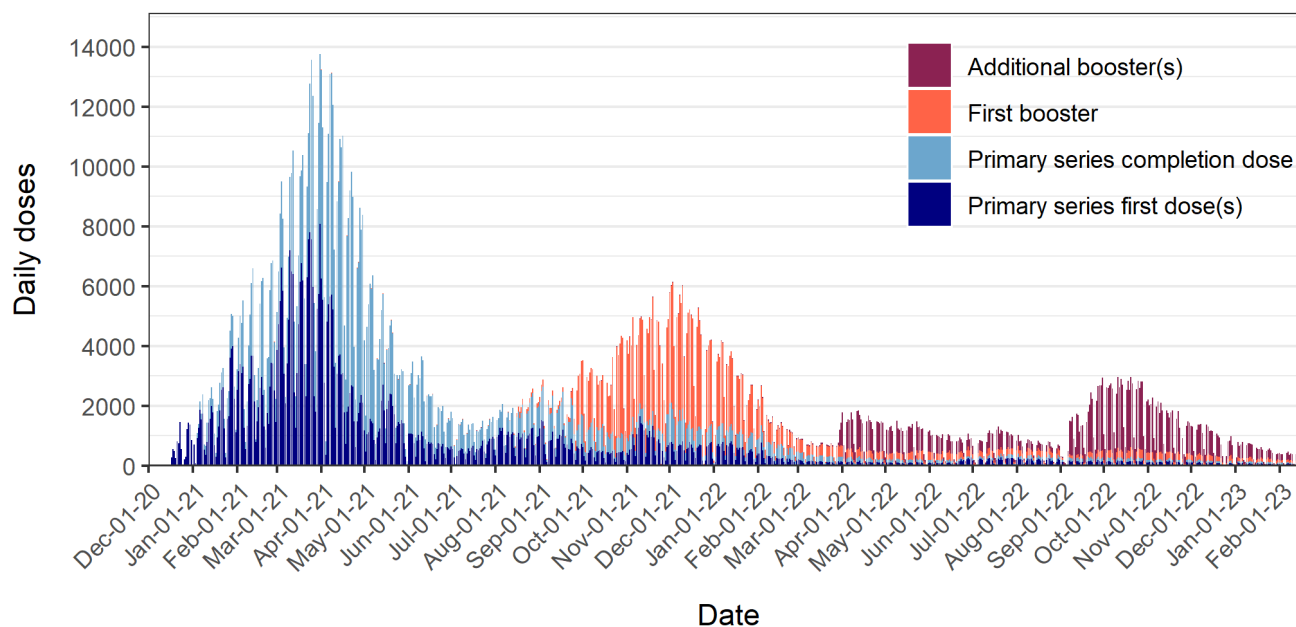
	Overall	**Booster eligible
Milwaukee County		
*Population	954,209	579,882
Received booster dose	36.8%	60.5%
City of Milwaukee		
*Population	596,886	329,033
Received booster dose	30.8%	55.8%
Milwaukee County Suburbs		
*Population	357,323	250,849
Received booster dose	47.0%	66.8%

***Overall population estimates from 2018 US Census American Community Survey**
****Booster eligible population is aged 5+ with complete primary vaccination prior to September 23, 2022 for Pfizer or Moderna series, or prior to December 22, 2022 for Johnson & Johnson**

Daily COVID-19 doses administered to Milwaukee County residents

Figure 1 shows daily total COVID-19 vaccine doses administered to Milwaukee County residents. A total of 1,766,138 doses (including booster doses) have been administered from December 12, 2020 through February 20, 2023. The dark blue color represents the first dose in a series (Pfizer or Moderna). The light blue color indicates a completion dose (first dose of Johnson & Johnson, second dose of Pfizer or Moderna, or third dose for Pfizer age 6M-4Y). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

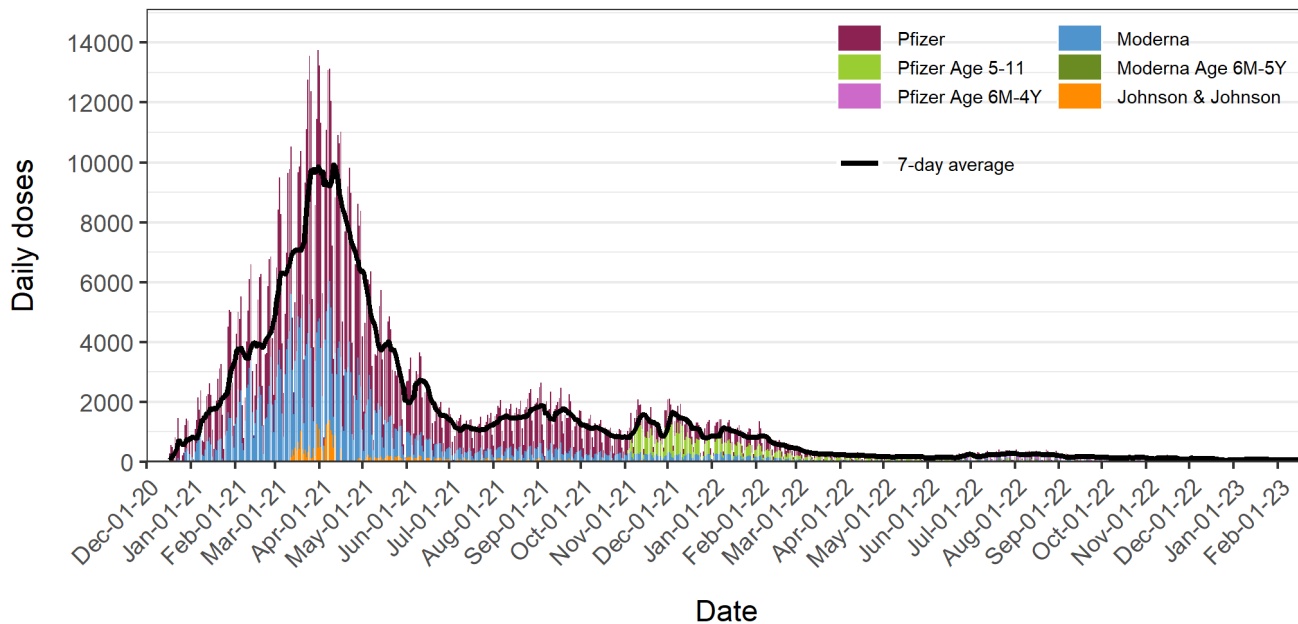
Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

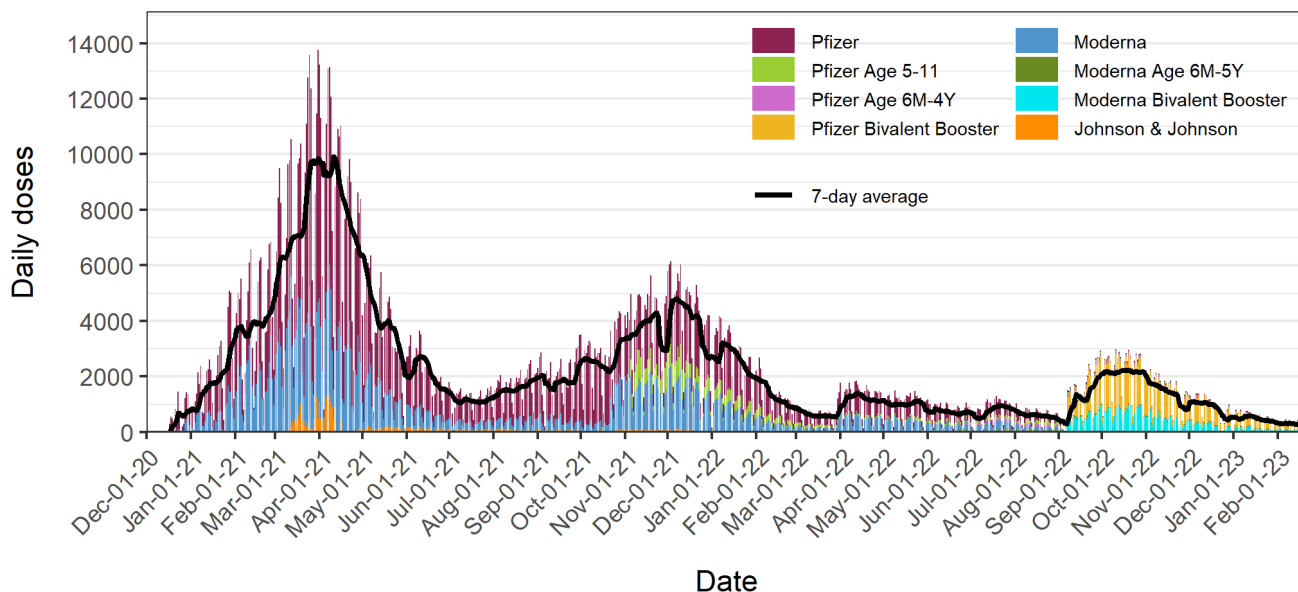
Figures 2a and 2b show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: Pfizer (red), Pfizer Age 5-11 (green), Moderna (blue), and Johnson & Johnson (orange). Daily primary vaccination doses peaked in late March to early April 2021 and have since declined until mid-summer when slight increases occurred in tandem with increasing cases thought to be driven by the delta variant. An increase in primary vaccination doses is observed in the second week of November 2021, driven by new eligibility among ages 5-11.

Figure 2a: Daily COVID-19 primary vaccination doses administered to Milwaukee Co. residents



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)

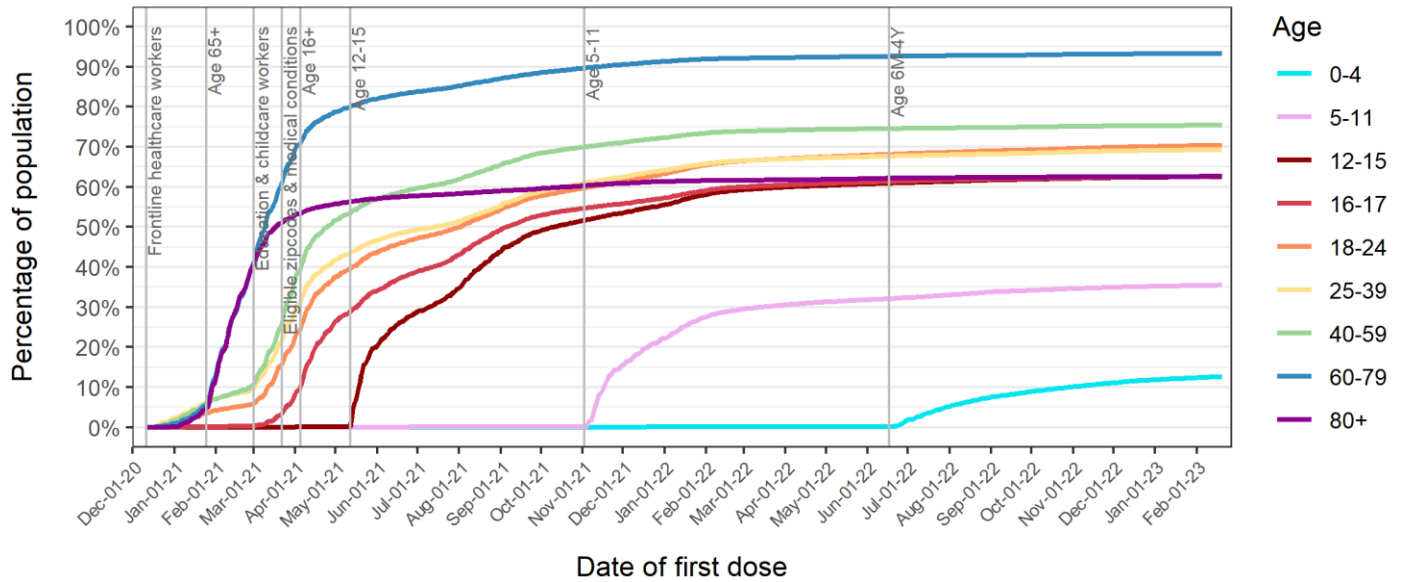


Data source: Wisconsin Immunization Registry (WIR)
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Percentages of Milwaukee County residents partially and completely vaccinated by age group

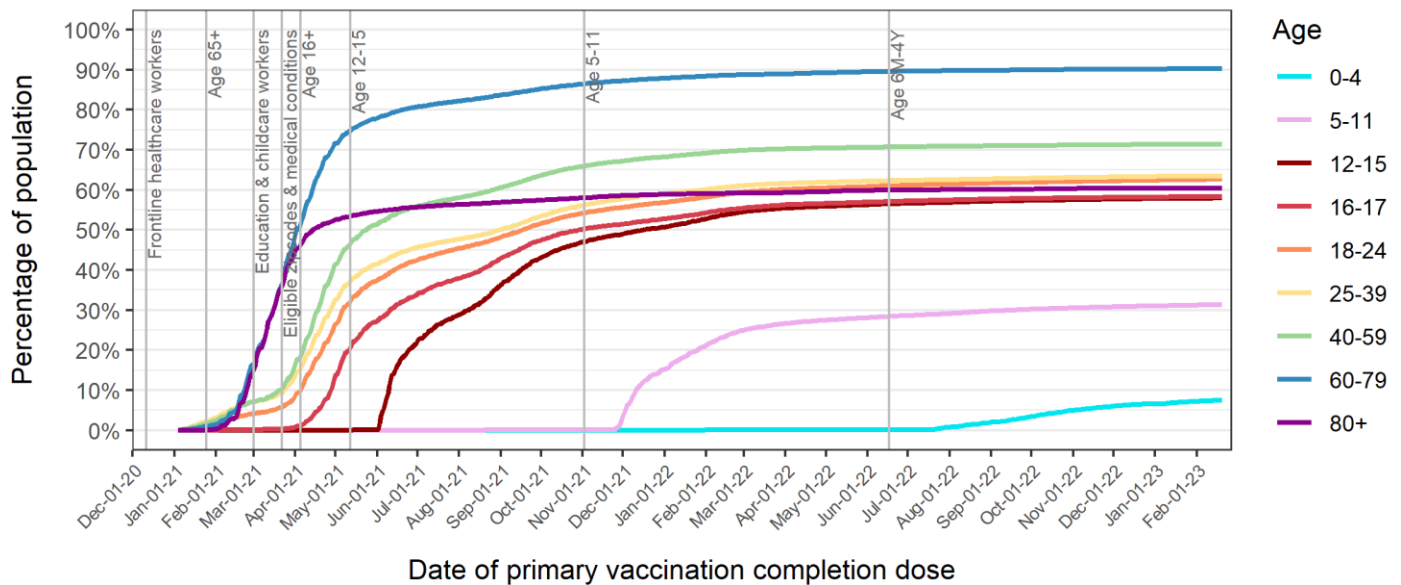
Figure 3 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

Figure 3: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine

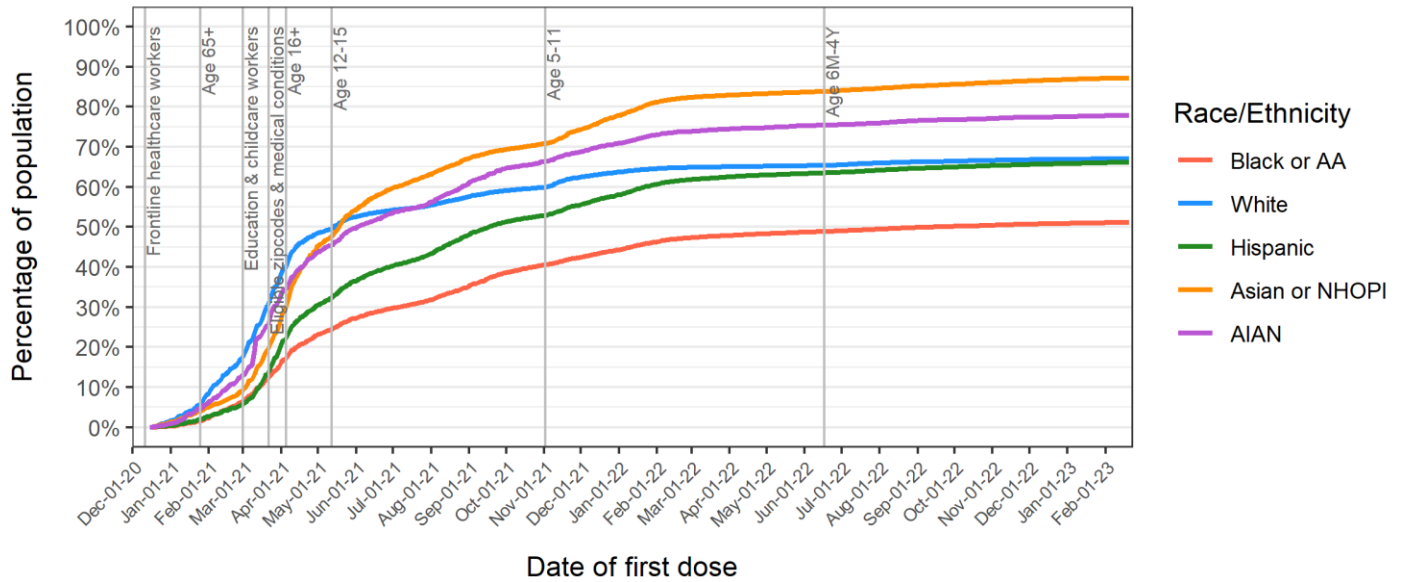


Data source: Wisconsin Immunization Registry (WIR)
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Percentages of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

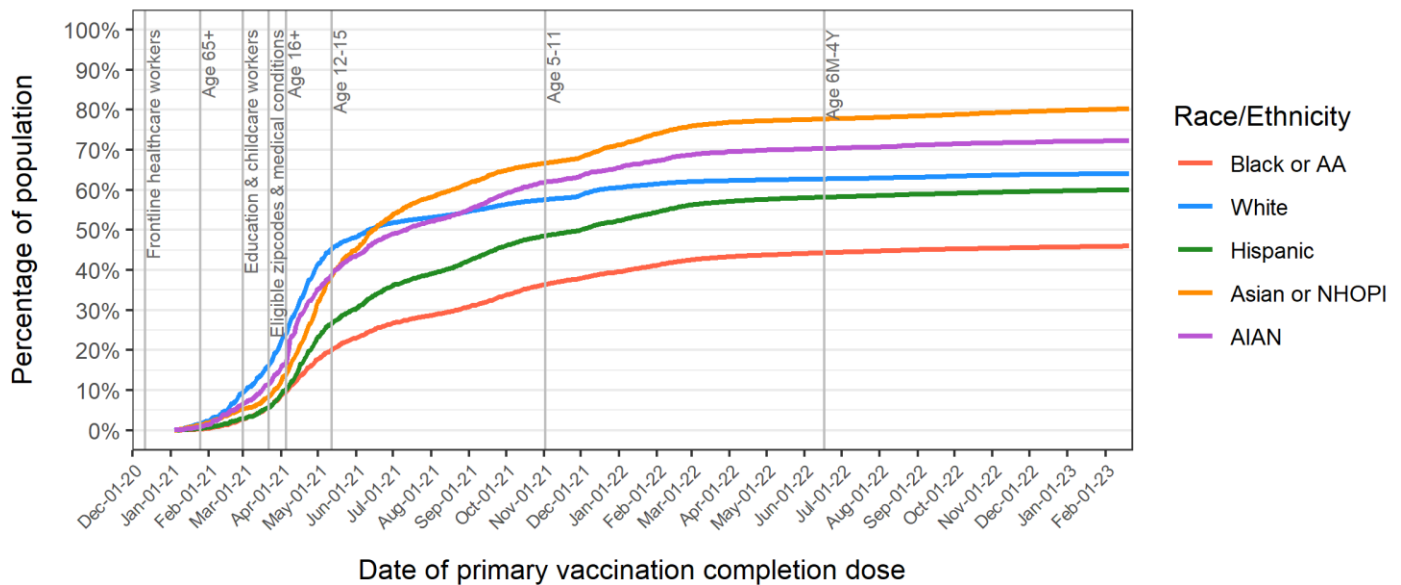
Figure 5 shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

Figure 5: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine



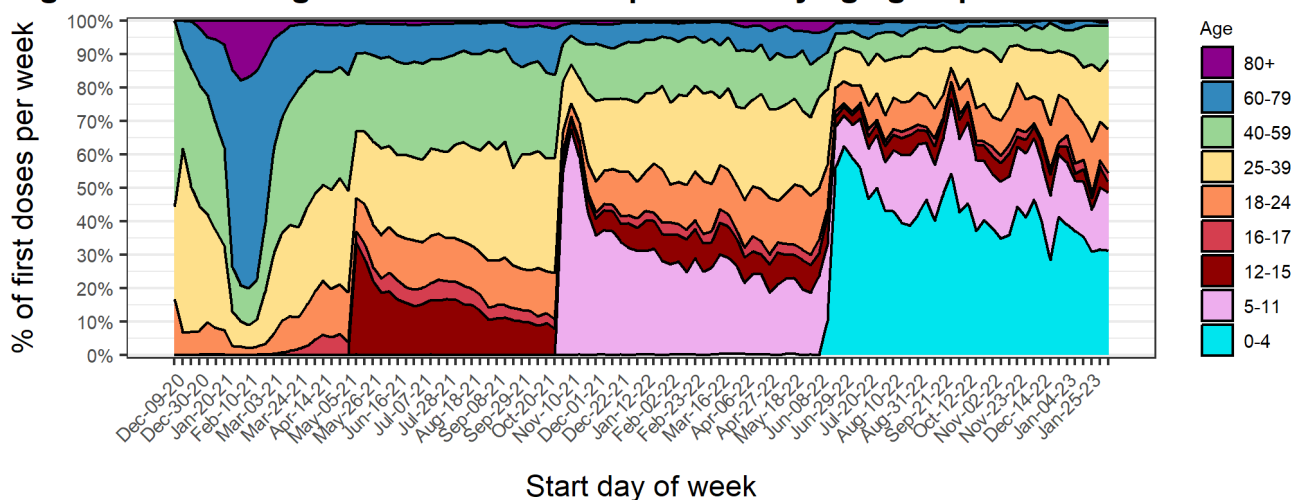
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Percentages of first doses of COVID-19 vaccine administered to Milwaukee County residents by age and race/ethnicity groups

Figure 7 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by age group. After vaccines first became available to healthcare personnel, middle-aged groups (25-59) were the majority of new vaccinees. After eligibility opened up to ages 65+, the oldest two age groups became the majority. The younger age groups (< 60) became the majority of people newly vaccinated since eligibility opened up to education staff on March 1st. With the eligibility of children aged 12+, we observed a sharp increase in vaccination for children. Similar increases were observed with the new eligibility of children ages 5-11, and later for ages 6M-4Y.

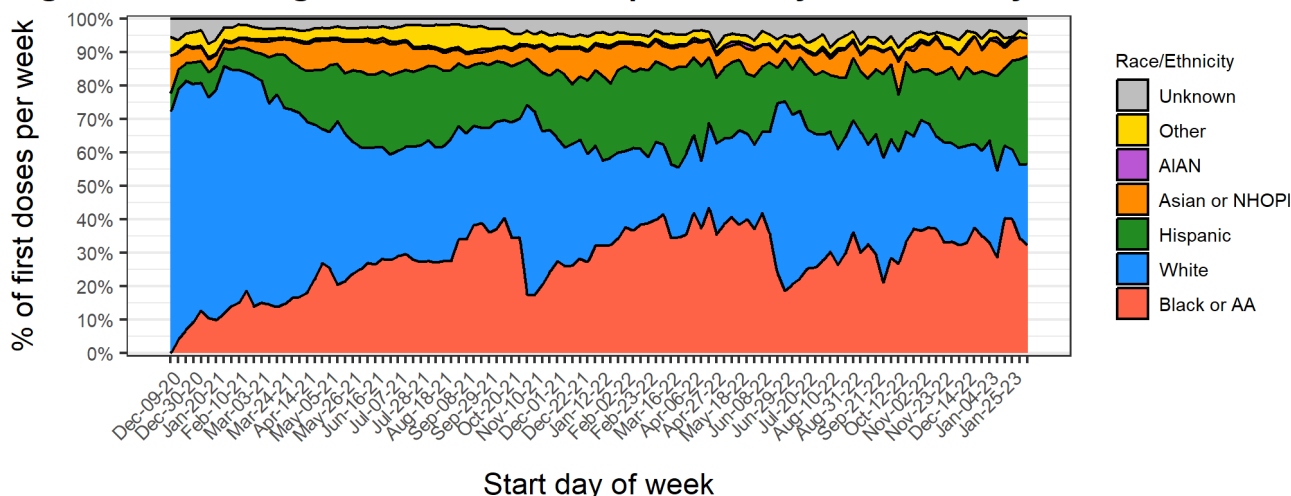
Figure 8 shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the newly vaccinated over time.

Figure 7: Percentage of total first doses per week by age group in Milwaukee Co.



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.



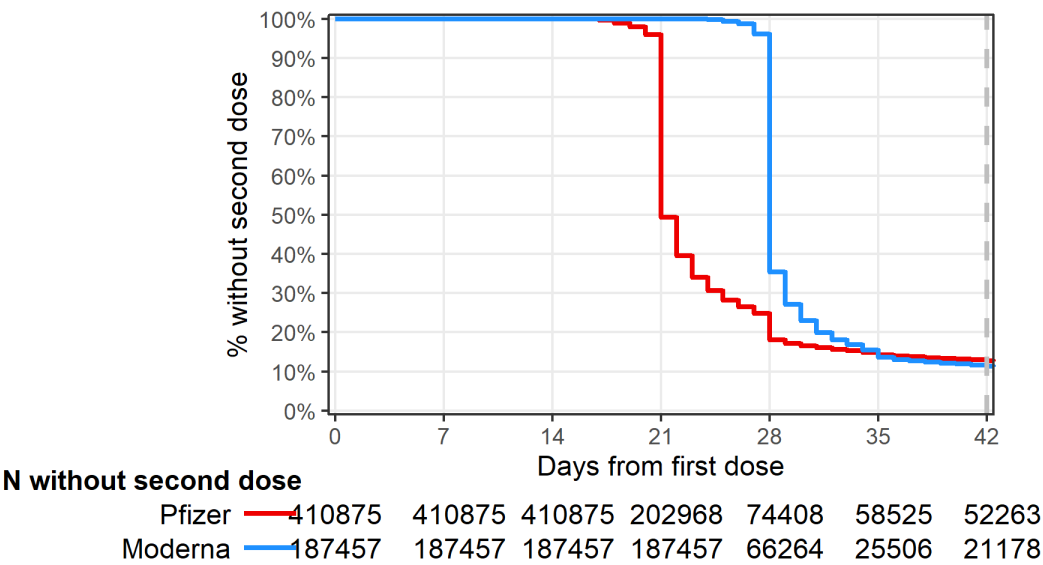
Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Completion of primary immunization series among Milwaukee County residents who received at least one dose of Pfizer or Moderna vaccines

Figure 9 describes the timing between primary vaccination doses for Milwaukee County residents who received Pfizer or Moderna vaccines. This graph includes data for residents who received their first dose of Pfizer or Moderna at least 42 days ago (prior to January 8, 2023). The recommended interval for receiving the second dose is 21 days for the Pfizer vaccine and 28 days for the Moderna vaccine; the second dose is considered valid if administered 4 days prior to the recommended interval and up to 42 days following the first dose for each vaccine.

Fully 87.7% of all residents who received their first dose of Pfizer prior to January 8, 2023 received their second dose within 42 days, indicating very strong completion within guidelines for those receiving a first dose.

Figure 9: Vaccine series completion among Milwaukee Co. residents receiving Pfizer or Moderna



Data source: Wisconsin Immunization Registry (WIR)
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

Summary of vaccine series completion and booster rates among vaccinated Milwaukee County residents

Table 1 summarizes the rates of primary vaccination series completion and booster uptake by groups based on first vaccine product received, age, sex, and race/ethnicity. The first column, rates of primary vaccination series completion, includes data for residents who received a first dose of Pfizer or Moderna at least 42 days ago; 42 days is the maximum recommended period for receiving the second dose. The second column, rates of booster uptake, includes data for booster eligible residents only; booster eligibility criteria are currently age 12 or older, with one dose of Johnson & Johnson vaccine at least 2 months ago or completion of Pfizer or Moderna primary vaccination series at least 5 months ago. While vaccine series completion rates are high and vary only slightly among groups, receipt of booster doses among booster eligible individuals varies significantly by vaccine product, age, and race/ethnicity with slight variation by sex.

Characteristic	Percent with second dose within 42 days among Pfizer and Moderna recipients ¹	*Percent boosted among eligible ¹
First vaccine received		
Pfizer	358,612 / 410,875 (87.3%)	218,018 / 372,859 (58.5%)
Moderna	166,279 / 187,457 (88.7%)	116,211 / 172,400 (67.4%)
Johnson & Johnson		16,810 / 34,623 (48.6%)
Age		
0-4	5,370 / 7,961 (67.5%)	
5-11	25,325 / 32,100 (78.9%)	9,870 / 27,410 (36.0%)
12-15	26,513 / 30,535 (86.8%)	12,249 / 28,047 (43.7%)
16-17	13,248 / 15,171 (87.3%)	6,429 / 14,064 (45.7%)
18-24	48,337 / 58,906 (82.1%)	23,467 / 56,024 (41.9%)
25-39	123,900 / 144,271 (85.9%)	71,616 / 140,605 (50.9%)
40-59	143,897 / 160,205 (89.8%)	103,061 / 164,096 (62.8%)
60-79	118,396 / 127,563 (92.8%)	105,737 / 128,409 (82.3%)
80+	19,905 / 21,620 (92.1%)	18,610 / 21,227 (87.7%)
Sex		
Female	281,898 / 320,080 (88.1%)	192,043 / 308,139 (62.3%)
Male	241,923 / 276,838 (87.4%)	158,450 / 270,550 (58.6%)
Unknown	1,070 / 1,414 (75.7%)	546 / 1,193 (45.8%)
Race/Ethnicity		
Black or AA	97,293 / 119,242 (81.6%)	57,195 / 112,469 (50.9%)
White	287,498 / 313,173 (91.8%)	216,947 / 311,328 (69.7%)
Hispanic	73,200 / 86,868 (84.3%)	40,273 / 82,881 (48.6%)
Asian or NHOPI	29,832 / 34,277 (87.0%)	16,832 / 31,911 (52.7%)
AIAN	2,975 / 3,402 (87.4%)	1,915 / 3,316 (57.8%)
Other	19,613 / 22,616 (86.7%)	11,102 / 21,554 (51.5%)
Unknown	14,480 / 18,754 (77.2%)	6,775 / 16,423 (41.3%)

¹n / N (%)

*Booster eligible population is aged 5+ with complete primary vaccination prior to September 23, 2022 for Pfizer or Moderna series, or prior to December 22, 2022 for Johnson & Johnson

Data Sources & Acknowledgments

This report was created by faculty and staff in the Medical College of Wisconsin (MCW) Institute for Health and Equity (IHE) in partnership with representatives from local health departments and faculty from the University of Wisconsin-Milwaukee Zilber School of Public Health. Data sources include the Wisconsin Immunization Registry (WIR) and the US Census Bureau.

Contact Information

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